

Renewable activity of Montana's electric cooperatives

Net Metering - At last count, co-ops had about 200 net meter installations. All co-ops offer up to 10 kW. In addition, six electric co-ops will go higher than this size and some have. At least two co-ops have already gone to 25 kW.

Flathead Electric Cooperative has never rejected a request for a facility above 10 kW. In fact, the co-ops has approved five or six larger than 10 kW. One project is a combination of solar and wind – with capacity output of 14 kW.

In one case, Park Electric Cooperative, based in Livingston, allowed larger than 10 kW hydro to be net metered to multiple accounts of the consumer. This flexibility in policy is due to Park Electric seeing added benefit due to the location of the system on Park's powerline distribution system.

Sun River Electric Cooperative, based in Fairfield, interconnected one 85 KW solar generator in a prime location and credits the value of its output to multiple accounts of the owner. This is yet another example of co-ops being able – due to local control – to find solutions beyond the basic net metering policy.

Purchase of larger renewable energy output – Co-ops have about 10 or so Qualifying Facilities interconnections (for renewable) larger than the co-ops' general policy of 10 kW on net metering. These interconnections facilitate the purchase of power output from larger projects. This includes output from wind and small high-head hydro generators. Generator sizes on these projects range from 65 to 250 kW on wind generation and from 65 kW to 350 kW on hydropower.

Flathead Electric Cooperative – Purchases methane gas at the Flathead County landfill to operate a 1.6 MW renewable energy generator the co-op owns. The generator's average production is 1.3 MW.

Missoula Electric Cooperative – The co-op is attempting to acquire methane gas at the Missoula County landfill to fuel a renewable energy generator that would supply power to Missoula Electric Cooperative members. The landfill site is outside the co-op's service area but the co-op is continuing to pursue this project.

Yellowstone Electric Cooperative – The co-op wheels electricity produced at a renewable energy methane-gas generator owned and operated by MDU.

Flathead Electric Cooperative – Purchases the renewable energy output of a biofuel generator owned by Stoltz-Conner Lumber Mill in Kalispell. The co-op buys the output at a rate high enough to allow 24-hour, seven-day-a-week operation of the generator.

Flathead Electric Cooperative – The co-op has paid for the construction and

rehabilitation of a hydropower plant owned by the City of Whitefish. Flathead Electric credits back to the City based on the output of two, 25 kW generators. The co-op is working on a similar arrangement with the City of Libby.

Electric Co-ops Near or West of the Continental Divide – Nearly all of the electricity purchased by these co-ops comes from hydropower produced by federal dams, the output of which is sold to the co-ops by Bonneville Power Administration (BPA).

Electric Co-ops East of the Continental Divide – An average of nearly 50 percent of the electricity purchased by co-ops east of the Divide comes from federal dams on the Missouri River and tributaries. The output from these dams is sold to the co-ops by Western Area Power Administration (WAPA). The two exceptions are Vigilante Electric and Glacier Electric. These co-ops serving east of the Divide receive nearly all their power from hydropower sold by BPA.

Electric Co-ops In Central and Eastern Montana – Most of the electricity to meet needs above WAPA for these co-ops comes from Basin Electric Power Cooperative. Most of these Montana electric co-ops are member owners of Basin Electric and, collectively, have two representatives on the Basin Electric Board of Directors.

Much of Basin Electric's generation is coal-fired. That is because this was the only choice, other than nuclear power, available when most of these plants were constructed. (This restriction was due to federal policy during the Carter Administration.) BUT BASIN ELECTRIC IS A LEADER IN RENEWABLES. With a total peak load of under 3,500 MW, Basin Electric has contracted for or built a total of about 1,400 MW of win energy. (By comparison, this amount is more than 10 times larger than the wind generation at Judith Gap.) Basin Electric has been acquiring this in recent years for about 2.5 cents per kWh in several locations that allows it to be more cost effectively integrated.

Basin Electric's integration on wind generation makes it a utility with one of the highest percentages in the nation of peak generation by renewable energy compared to peak load. At its highest production, this renewable energy peaks at 40 percent of Basin's peak load. These are in some of the best wind regimes in the nation.

Basin Electric also has partnered with a renewable energy technology to recover lost heat at Northern Boarder pipeline pumping installations. Utilizing the heat, electricity is produced. This output totals about 5 MW per site (one is in Montana near Culbertson).

Montana electric co-ops and electric cooperatives in other states worked with Basin to have the ability to purchase the output of renewable energy generators less than 150 kW in size. This output is purchased at up to two times the co-ops'

avoided cost. (Our all-requirement contracts commit us to make all our purchases above WAPA from Basin but Basin acts as the purchaser through us to the extent they can.)

Electric co-ops have tried to maximize renewable energy purchases at a cost that keeps rates affordable. Affordability is critical.